

REMARKS

Applicants amend claim 188 and add new claims 315-317. Accordingly, claims 188-191 and 314-317 are all the claims currently pending in the application.

As a preliminary issue, Applicants request that the Examiner consider the references cited in the IDSs of September 30, 2005 and July 13, 2007 and return signed and initialed copies of the PTO forms with the next Office communication.

Claim rejections

Claims 188-191 and 314 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain (US Patent No. 6,515,257) in view of James (US Patent No. 5,463,200) and Sasaki (US Patent 6,977,775). Claims 190 and 191 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view of James and Sasaki and further in view of JP 06043505 (Tamaoki) or JP 2003051142 (Somei). Claims 188-191 and 314 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view of James, Loschner (US Patent No. 6,989,546) and Abboud (US Patent No. 6,433,348). Claims 190 and 191 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view of James, Loschner and Abboud and further in view of Tamaoki or Somei. Applicants respectfully traverse these rejections for at least the following reasons.

Independent claim 188

Claim 188 recites, inter alia, “said independently focusing comprising moving at least one optical element, thus changing a focal length for focusing an optical beam, associated with one of the plurality of laser beams to be focused, without f-theta optical elements.” (emphasis added). Applicants submit that none of the cited references teach or fairly suggest this limitation.

Regarding this limitation, the Examiner asserts that James and Sasaki disclose the feature of the claim 188 recited above.

First, Applicants submits that it would not have been obvious to combine the teachings of Jain, James and Sasaki for at least the following reasons.

Jain is directed to an opto-mechanical system which delivers controlled pulses of laser energy. Jain discloses a microlens array 10 and micro-mirror array 12 (FIG. 1). However, none of the lenses of the microlens array provide any independent focusing, and none of the lenses of the microlens array are moveable. With respect to the micro mirror array, Applicants submit likewise, that none of the micro mirrors provide any focusing, and none of the micro mirrors provide a directing or beams to independently selectable locations. Rather, the micro mirrors are each in either an on state or an off state to either direct a beam incident thereon to a substrate or to discard a beam incident thereon.

James is directed to a method of marking of a work piece by light energy in order to create selected pattern. James discloses lenslets 16 through which light passes to constitute a beamlet 18 that is focus to a focal plane FP. Moreover, James discloses that the lenslet modules are available in which the focal length of the respective lenslets are different form each other. (column 4, lines 35-55).

Sasaki is directed to a non-dynamic apparatus (no scanning) for crystallizing a semiconductor. Sasaki describes focusing units 59 which each include a mirror 44, lenses 46 and 48 and a convex lens 50 (FIG. 7). Moreover, Sasaki discloses that the focusing units 59 are movable with an allowable range (column 8, lines 7-15)

Applicants submit that Sasaki is in a completely different field of invention (a method and apparatus for crystallizing a semiconductor). Moreover, Applicants submit that since Jain and James provide microlens 12 and lenslet 18 which are elements that are laterally immovable, there would have been no suggestion or motivation to modify these elements (microlens 12 and lenslet 18) to incorporate lateral movement as taught by Sasaki. In fact, such modifications would teach away from the teachings of Jain and James. Therefore, one of ordinary skill in the art at the time the invention was made would not have been motivated to combine the teachings of Jain, James and Sasaki to produce the unique features of the invention. Second, Applicant respectfully submits that even if, *assuming arguendo*, the references are combined as suggested by the Examiner, the resultant product of the combination still would not disclose the feature of "said independently focusing comprising moving at least one optical element, thus changing a focal length for focusing an optical beam, associated with one of the plurality of laser beams to be focused, without f-theta optical elements."

For Example, Sasaki is directed to an apparatus for crystallizing a semiconductor. Sasaki describes focusing units 59 which each include a mirror 44, lenses 46 and 48 and a convex lens 50 (FIG. 7). The focusing units 59 divert each of the horizontal sub-beams SB downward in a vertical direction. Moreover, Sasaki discloses that the focusing units 59 are movable with an allowable range (column 8, lines 7-15). However, Sasaki does not disclose moving at least one optical element, thus changing a focal length for focusing an optical beam.

Specifically, Sasaki discloses that moving the focusing units 59 in the direction indicated by the arrow C in FIG. 8. This direction is illustrated in FIG. 8 to be sideways direction and not

in the direction of the sub beam. Therefore, Sasaki does not disclose that the movement of the focusing units 59 changing a focal length.

Jain, James, Loschner, Abboud, Tamaoki and Somei do not remedy the discussed deficiencies in Sasaki.

In view of the above, Applicants submit that claim 188 is patentable over any of the cited combination of references and that claims 189-191 and 314 are patentable at least by virtue of their dependency. Applicants respectfully request that the rejection of the claims be reconsidered and withdrawn.

New claims

Applicants submit that new claims 315 - 317 depend from claim 188, and therefore are allowable at least by virtue of their dependency. Claims 315 - 317 are at least supported by FIG. 1 and its corresponding description in the specification.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Laura Moskowitz
Registration No. 55,470

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: March 7, 2008